

1 What is claimed is:

2
3 1. An imaging apparatus, comprising:

4 a first media tray configured to hold a first imaging media;

5 a second media tray configured to hold a second imaging media;

6 a pick roller configured to selectively pick the first imaging media from the first
7 media tray and the second imaging media from the second media tray, wherein imaging
8 media is picked from one tray at a time.

9
10 2. The imaging apparatus of claim 1, and further comprising an actuating
11 mechanism which is operatively connected to the first media tray, and which is
12 configured to cause the first media tray and the second media tray to be positioned one-
13 at-a-time relative to the pick roller to thereby present the first media and the second
14 media, respectively, to the pick roller for picking.

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16 3. The imaging apparatus of claim 2, and wherein the actuating mechanism is also
17 operatively connected to the second media tray.

18
19 4. The imaging apparatus of claim 2, and further comprising:

20 an actuator operatively connected to the actuating mechanism; and,

21 a controller configured to automatically control the actuation of the actuator in
22 response to predetermined criteria.

23
24 5. The imaging apparatus of claim 2, and further comprising an input device
25 configured to control the actuation of the actuator in response to an input from an
26 operator.

27
28 6. The imaging apparatus of claim 1, and wherein the first media tray and the
29 second media tray are configured to remain substantially parallel to one another.

1 7. An imaging apparatus, comprising:
2 a first media tray configured to hold a first imaging media;
3 a second media tray configured to hold a second imaging media, wherein the first
4 media tray is slidably disposed upon the second media tray; and,
5 a pick roller, wherein the first media tray is configured to slide relative to the
6 second media tray to facilitate selective presentation of the first imaging media and the
7 second imaging media, one-at-a-time, to the pick roller for picking.
8

9 8. The imaging apparatus of claim 7, and further comprising:
10 a gear rack supported on the first media tray; and,
11 a pinion gear meshingly engaged with the gear rack, and wherein rotation of the
12 pinion gear causes the first media tray to slide relative to the second media tray.
13

14 9. The imaging apparatus of claim 8, and wherein:
15 rotation of the pinion gear in a first direction causes the first imaging media to be
16 presented to the pick roller; and,
17 rotation of the pinion gear in a second direction, opposite the first direction,
18 causes the second imaging media to be presented to the pick roller.
19

20 10. The imaging apparatus of claim 7, and further comprising:
21 a first lift plate which is configured to support the first imaging media thereon and
22 which is pivotally connected to the first media tray;
23 a second lift plate which is configured to support the second imaging media
24 thereon and which is pivotally connected to the second media tray; and,
25 a lifting device configured to cause the first lift plate and the second lift plate to
26 pivot, one-at-a-time, relative to the first media tray and the second media tray,
27 respectively, to facilitate presentation of the first imaging media and the second imaging
28 media, respectively, to the pick roller.
29

1 11. The imaging apparatus of claim 10, and wherein the lifting device comprises:

2 a lifting member configured to selectively contact the first lift plate and the second
3 lift plate, one-at-a-time, as a result of the movement of the first media tray relative to the
4 second media tray, wherein such contact causes the first lift plate and the second lift
5 plate to pivot; and,

6 a biasing member configured to urge the lifting member toward the first lift plate
7 and the second lift plate to facilitate lifting thereof by the lifting member.
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9 12. The imaging apparatus of claim 7, and further comprising:

10 a pair of gear racks, wherein one of the gear racks is supported on the first media
11 tray and the other of the gear racks is supported on the second media tray; and,

12 a pinion gear meshingly engaged with both of the gear racks, wherein rotation of
13 the pinion gear in a first direction causes the first imaging media to be presented to the
14 pick roller, and rotation of the pinion gear in a second direction opposite the first direction
15 causes the second imaging media to be presented to the pick roller.
16

17 13. An imaging apparatus, comprising:

18 a first media tray having a first lift plate pivotally mounted thereto, wherein the
19 first lift plate is configured to support thereon a first imaging media;

20 a second media tray having a second lift plate pivotally mounted thereto, wherein
21 the second lift plate is configured to support thereon a second imaging media, wherein
22 the first media tray is slidably mounted on the second media tray and configured to slide
23 relative thereto;

24 an actuating mechanism configured to control movement of the first media tray
25 relative to the second media tray;

26 a lifting device comprising a lifting member and a biasing member, wherein the
27 lifting member is biased toward the first and second lifting plates by the biasing member
28 to thereby contact the first lift plate and the second lift plate, one-at-a-time, and as the
29 result of movement of the first media tray relative to the second media tray, wherein
30 such contact of the lifting member with the first lifting plate and the second lifting plate
31 results in pivoting of the first lifting plate and the second lifting plate, respectively; and,

32 a pick roller, wherein the pivoting of the first lift plate and the second lift plate
33 results in presentation of the first imaging media and the second imaging media,
34 respectively, one-at-a-time, to the pick roller for picking.
35

1 14. The imaging apparatus of claim 13, wherein the actuating mechanism comprises:
2 a pair of gear racks, wherein one of the gear racks is supported on the first media
3 tray and the other of the gear racks is supported on the second media tray;
4 a pinion gear meshingly engaged with each of the gear racks, wherein:
5 rotation of the pinion gear causes the first media tray to slide relative to
6 the second media tray;
7 rotation of the pinion gear in a first direction causes the first imaging media
8 to be presented to the pick roller; and,
9 rotation of the pinion gear in a second direction opposite of the first
10 direction causes the second imaging media to be presented to the pick roller.

11
12 15. An imaging apparatus, comprising:
13 a chassis;
14 a pick roller operationally supported on the chassis;
15 a first media tray configured to hold a first imaging media;
16 an actuating mechanism operatively connected between the chassis and the first
17 media tray; and,
18 a second media tray movably supported on the chassis, and configured to hold a
19 second imaging media, wherein:
20 the first media tray is slidably supported on the second media tray;
21 the first media tray is slidable in a first direction relative to the second
22 media tray;
23 the first media tray is slidable in a second direction relative to the second
24 media tray;
25 sliding of the first media tray in the first direction results in presentation of
26 the first imaging media to the pick roller for picking; and,
27 sliding of the first media tray in the second direction results in presentation
28 of the second imaging media to the pick roller for picking.

29
30 16. The imaging apparatus of claim 15, and wherein:
31 a pivot axis is defined on the second media tray;
32 the second media tray is pivotally connected to the chassis and thereby
33 configured to pivot about the pivot axis; and,
34 movement of the first media tray relative to the second media tray causes the
35 second media tray to pivot about the pivot axis.

1 17. The imaging apparatus of claim 15, and wherein:
2 the second media tray has a first end and an opposite distal second end;
3 the second imaging media is positioned proximate the first end of the second
4 media tray;
5 the first media tray, when sliding in the first direction, moves toward the first end
6 of the second media tray; and,
7 the first media tray, when sliding in the second direction, moves toward the
8 second end of the second media tray.
9

10 18. The imaging apparatus of claim 16, and wherein:
11 the second media tray has a first end and an opposite distal second end;
12 the second imaging media is positioned proximate the first end of the second
13 media tray;
14 the pivot axis is positioned proximate the second end of the second media tray;
15 the first media tray, when sliding in the first direction, moves toward the first end
16 of the second media tray; and,
17 the first media tray, when sliding in the second direction, moves toward the
18 second end of the second media tray.
19

20 19. The imaging apparatus of claim 18, and further comprising an actuator that is
21 configured to cause the second media tray to move relative to the first media tray.
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23 20. The imaging apparatus of claim 15, and wherein the actuating mechanism is
24 substantially in the form of an elongated member having a first end pivotally connected
25 to the first media tray, and a distal opposite second end pivotally connected to the
26 chassis, wherein operation of the actuating mechanism causes the first media tray to
27 move in a substantially arcuate manner relative to the chassis.
28

29 21. The imaging apparatus of claim 15, and wherein the first media tray and the
30 second media tray remain substantially parallel to one another.
31

32 22. The imaging apparatus of claim 15, and further comprising a biasing member
33 connected between the chassis and the second media tray, and configured to bias the
34 second media tray toward the pick roller.
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1 23. A method of using a first imaging media and a second imaging media in an
2 imaging device having a pick roller, the method comprising:

3 supporting the first imaging media and the second imaging media on the imaging
4 device simultaneously;

5 picking the first imaging media with the pick roller while the first imaging media
6 and the second imaging media are simultaneously supported on the imaging device;
7 and,

8 picking the second imaging media with the pick roller while the first imaging
9 media and the second imaging media are simultaneously supported on the imaging
10 device.

11
12 24. the method of claim 23, and further comprising:

13 presenting the first imaging media for picking by moving the first imaging media
14 into contact with the pick roller;

15 moving the first imaging media out of contact with the pick roller; and,

16 presenting the second imaging media for picking by moving the second imaging
17 media into contact with the pick roller.